Bruhat Bangalore Mahanagara Palike

Name of Work: Improvement to roads and drains at Maruthinagara, Papanna Badavane balance main and cross roads in Ward no-01, Yelahanka sub division

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	Removing & Refixing stone slabs of drains and pointing in C.M (1:3) (Page No 27., I.No.5.33 of KPWD S.R 2018-19).								
	Basic rate		105.00						
	6.00% AW		6.3						
	Sub total		**111.3**						
	Maruthinagara								
	4th Main road	2	80.00	0.90		144.00			
	2nd cross	2	58.00	0.90		104.40			
	3rd cross	2	150.00	0.90		270.00			
	4th cross	2	130.00	0.90		234.00			
	5th main road	2	80.00	0.90		144.00			
	Surabi Layout								
	2nd cross	2	220.00	0.90		396.00			
						1292.40			
	Deduct 30%					387.72			
						904.68	**Sqm**	**111.30**	**100690.88**
2	KSRRB 300-1. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No 143., I.No.19.1 of KPWD S.R 2018-19).								
	Basic rate		130.00						
	6.00% AW		7.8						
	Sub total		**137.8**						
	5 Km Lead, Loading and Unloading		69.8						
	Total		**207.6**						
	New RCC Drain								
	Maruthinagara								
		2	64.00	1.10	1.10	154.88			
	Desilt								
	Maruthinagara								
	4th Main road	2	80.00	0.50	0.50	40.00			
	2nd cross	2	58.00	0.50	0.50	29.00			
	3rd cross	2	150.00	0.50	0.50	75.00			
	4th cross	2	130.00	0.55	0.50	71.50			
	5th main road	2	80.00	0.55	0.50	44.00			
	Surabi Layout								
	2nd cross	2	220.00	0.60	0.50	132.00			
						546.38	**Cum**	**207.60**	**113428.49**
3	KSRB 4-1.2 : Providing and laying in position **plain cement concrete of Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.13/I.4.2) PWD SR 2018-19								

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
Basic rate		5194.00						
6% AW		311.64						
Sub Total		5505.64						
ew RCC Drain								
aruthinagara								
	2	64.00	1.00	0.15	19.20			
					19.20	Cum	5505.64	105708.29

SRB 4.2.2 : Providing and laying in position reinforced cement concrete of **design mix M20** with OPC ement @ 320kgs, with 20mmand down size graded granite metal coarse aggregates @0.0.69cum and ne aggregtes @ 0.460cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, achine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation linth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any hickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, tring or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., ncluding cost of all materials, labour, HOM of machinery, curing, complete as per specifications. pecification No. KBS 4.1, 4.6(I No-4.11,P No-14) KPWD S.R 2018-19

Basic rate		5659.00						
6% AW		339.54						
Sub Total		5998.54						
New RCC Drain								
Maruthinagara								
Raft	2	64.00	0.80	0.15	15.36			
Wall	4	64.00	0.15	0.60	23.04			
					38.40	Cum	5998.54	230343.94

KSRB 4-6.4 : Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2(I No-4.31,P No-16) KPWD S.R 2018-19

Basic rate		358.00						
6% AW		21.48						
Sub Total		379.48						
New RCC Drain								
Maruthinagara								
Wall	8	64.00		0.60	307.20			
					307.20	Sqm	379.48	116576.26

KSRB 4.9.2 : Providing **T.M.T steel reinforcement for R.C.C** workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3(I No-4.46.2,P No-18) KPWD S.R 2018-19

Basic rate	70966.00						
6% AW	4257.96						
Sub Total	75223.96						

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
ew RCC Drain								
Okg/cum								
		38.40		60.00	2.30			
					2.30	Tn	75223.96	173316.00
roviding precast slab of 100 mm thick including cost of all materials, labour, uring,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data								
Data rate		2337.00						
Maruthinagara								
th Main road	2	10.00	0.90		18.00			
nd cross	2	8.00	0.90		14.40			
rd cross	2	12.00	0.90		21.60			
th cross	2	18.00	0.90		32.40			
th main road	2	6.00	0.90		10.80			
urabi Layout								
nd cross	2	15.00	0.90		27.00			
lew RCC Drain								
Maruthinagara								
	2	64.00	0.75		96.00			
					220.20	Sqm	2337.00	514607.40
KSRRB M300-14. **Excavation for roadwork** in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (Page No143., I.No.19.14 of KPWD S.R 2018-19).								
Basic rate		41.00						
6.00% AW		2.46						
Sub total		**43.46**						
5 Km Lead		12.28						
Total		**55.74**						
Maruthinagara								
4th Main road	1	115.00	4.90	0.35	197.23			
4th cross	1	150.00	4.30	0.35	225.75			
5th main road	1	92.00	4.40	0.35	141.68			
3rd cross	1	158.00	4.90	0.35	270.97			
2nd cross	1	58.00	3.85	0.35	78.16			
Surabi Layout								
2nd cross	1	230.00	5.50	0.35	442.75			
Yelamma temple road	1	124.00	4.40	0.35	190.96			
					1547.49	Cum	55.74	86,257.09
KSRRB 300-Compaction KSRRB 300-58. **Compaction of original ground** with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (P.No. 147, I.No. 19.64) KPWD S.R 2018-19								
Basic rate		6.00						
6.00% AW		0.36						
Sub total		**6.36**						
Maruthinagara								
4th Main road	1	115.00	4.90		563.50			
4th cross	1	150.00	4.30		645.00			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
ain road	1	92.00	4.40		404.80			
ross	1	158.00	4.90		774.20			
ross	1	58.00	3.85		223.30			
ol Layout								
ross	1	230.00	5.50		1265.00			
mma temple road	1	124.00	4.40		545.60			
					4421.40	Sqm	6.36	28,120.10
struction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse ed crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at C, Carriage of mixed material to work site, spreading in uniform layers with motor grader on pared surface and compacting with vibratory power roller to achieve the 98 % proctor density, plete as per specifications. Clause 401 of MORTH V Revision. (Page No 153., I.No.20.5 of KPWD S.R 8-19).								
Basic rate		1882.00						
6.00% AW		112.92						
Sub total		1994.92						
ruthinagara								
Main road	1	115.00	4.90	0.15	84.53			
cross	1	150.00	4.30	0.15	96.75			
main road	1	92.00	4.40	0.15	60.72			
cross	1	158.00	4.90	0.15	116.13			
d cross	1	58.00	3.85	0.15	33.50			
rabi Layout								
d cross	1	230.00	5.50	0.15	189.75			
lamma temple road	1	124.00	4.40	0.15	81.84			
					663.21	Cum	1994.92	1323050.89
RRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in echanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the esired density complete as per specifications. MORTH Specification No. 406 (P.No.155 I.No.20.18) PWD SR 2018-19								
Basic rate		1888.00						
6.00% AW		113.28						
Sub total		2001.28						
laruthinagara								
th Main road	1	115.00	4.90	0.23	126.79			
th cross	1	150.00	4.30	0.23	148.35			
th main road	1	92.00	4.40	0.23	93.10			
rd cross	1	158.00	4.90	0.23	178.07			
nd cross	1	58.00	3.85	0.23	51.36			
urabi Layout								
nd cross	1	230.00	5.50	0.23	290.95			
elamma temple road	1	124.00	4.40	0.23	125.49			
					1014.10	Cum	2001.28	2029507.05

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
3 M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of ılar base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 sqm using mechanical means complete as per specifications. Clause 502 of MORTH V revision .158/It No.21.6) KPWD SR 2018-19								
Basic rate		34.00						
6.00% AW		2.04						
Sub total		**36.04**						
)BM								
ıthinagara								
Main road	1	115.00	4.90		563.50			
cross	1	150.00	4.30		645.00			
main road	1	92.00	4.40		404.80			
cross	1	158.00	4.90		774.20			
cross	1	58.00	3.85		223.30			
ıbi Layout								
cross	1	230.00	5.50		1265.00			
ımma temple road	1	124.00	4.40		545.60			
					4421.40	**Sqm**	**36.04**	**159347.26**
RB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared ck topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding ıning of road surface) including cost of all materials, labour, HOM complete as per specifications. use 503 of MORTH V revision. (P.No.158 & I.No.21.7) KPWD SR 2018-19								
Basic rate		14.00						
6.00% AW		0.84						
Sub total		**14.84**						
BC								
ıruthinagara								
ı Main road	1	115.00	4.90		563.50			
ı cross	1	150.00	4.30		645.00			
ı main road	1	92.00	4.40		404.80			
d cross	1	158.00	4.90		774.20			
d cross	1	58.00	3.85		223.30			
ırabi Layout								
d cross	1	230.00	5.50		1265.00			
lamma temple road	1	124.00	4.40		545.60			
					4421.40	**Sqm**	**14.84**	**65,613.58**
SRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates f specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to ork site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory nd tandem rollers to achieve the desired compaction in all respects complete as per specifications. lause 505 of MORTH V revision. - do - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II 50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.160 It.No.21.17.6) KPWD SR 2018-19								
Basic rate		7284.00						
6.00% AW		437.04						
Sub total		**7721.04**						
Maruthinagara								
th Main road	1	115.00	4.90	0.05	28.18			

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
4th cross	1	150.00	4.30	0.05	32.25			
5th main road	1	92.00	4.40	0.05	20.24			
3rd cross	1	158.00	4.90	0.05	38.71			
2nd cross	1	58.00	3.85	0.05	11.17			
Surabi Layout								
2nd cross	1	230.00	5.50	0.05	63.25			
Yelamma temple road	1	124.00	4.40	0.05	27.28			
					221.07	**Cum**	**7721.04**	**1706890.31**

KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision. - do - using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4% VG-30 Bitumen (P.No.162 Item No.21.22.6) KPWD SR 2018-19

Basic rate		8472.00						
6.00% AW		508.32						
Sub total		**8980.32**						
Maruthinagara								
4th Main road	1	115.00	4.90	0.04	22.54			
4th cross	1	150.00	4.30	0.04	25.80			
5th main road	1	92.00	4.40	0.04	16.19			
3rd cross	1	158.00	4.90	0.04	30.97			
2nd cross	1	58.00	3.85	0.04	8.93			
Surabi Layout								
2nd cross	1	230.00	5.50	0.04	50.60			
Yelamma temple road	1	124.00	4.40	0.04	21.82			
					176.86	**Cum**	**8980.32**	**1588223.47**

6 KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (P.No.182 & I.No.24.15) KPWD SR 2018-19

Basic rate		429.00						
6.00% AW		25.74						
Sub total		**454.74**						
Maruthinagara								
4th Main road	2	115.00	0.10		23.00			
4th cross	2	150.00	0.10		30.00			
5th main road	2	92.00	0.10		18.40			
3rd cross	2	158.00	0.10		31.60			
2nd cross	2	58.00	0.10		11.60			
Surabi Layout								
2nd cross	2	230.00	0.10		46.00			
Yelamma temple road	2	124.00	0.10		24.80			
					185.40	**Sqm**	**580.71**	**107663.63**

Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
							Total Construction Cost	8449344.66
							4.00% KRIDL	337973.79
							12.00% GST	1013921.36
							2.0% DPR & PMC Charges	198500.00
							Misc and rounding off	260.20
							Sub Total	10000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019 and Data Rates

Assistant Engineer
Ward No-01
BBMP Bangalore

Asst. Executive Engineer,
Yelahanka Sub Division
BBMP Bangalore

Executive Engineer,
Yelahanka Division
BBMP Bangalore

ADMINISTRATIVELY SANCTIONED FOR Rs 1000000/-

Rupees Rupees one Crore

U/H Job no. 001-19-00001

Registered as EE ( ) _____

Subject to conditions contained in enclosed memo EE ( ) No _____/9/.

Dt _____ Estimate A/Sanctioned

J.(Ly)no/18/08/18-10 No _____

dated 16-11-2018 Rs Rs - 10000000/-

Joint Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Technical Sanction
Accorded For .....
Head of A/C.....
CER NO :97/18-19 **Dt:**..29-11-18

TA CE (YNK)

Yelahanka sub division

Holy Rosary Church
ಪವಿತ್ರ ಜಪಮಾಲೆ
ದೇವಾಲಯ

Om Shakthi Temple

Hilton High Innovative
Learning - A day...
ಹಿಲ್ಟನ್ ಹೈ

Brigade Honda
ಬ್ರಿಗೇಡ್
ಹೊಂಡಾ

Mahaveer Clover
ಮಹಾವೀರ್
ಕ್ಲೋವರ್

The Pentecostal
Mission (TPM)

Covenant School of
Worship, Bengaluru

14th Cross Rd
19 Cross
13th Cross
3rd Main R
14th Cross Rd
11th Cross
15 Cross
3rd Main Rd
115m
4th main
5th main - 92m
4th cross - 150m
3rd cross - 158m
2nd cross - 58m
7th Cross
12 Cross Rd
11 Cross St
1st Main Rd
11th Cross Rd
10th Cross Rd
4th Cross
3rd Cross Rd
2nd Cross
1st Cross Rd
9th Cross Rd
8th Cross Road
7th Cross Road
4th Cross
1st Main
R.V. Kalyanamantap

HDFC Bank
ಎಚ್‌ಡಿಎಫ್‌ಸಿ
ಬ್ಯಾಂಕ್

Andhra Bank
ಆಂಧ್ರ
ಬ್ಯಾಂಕ್

Yellamma
temple road - 124m
1st A Main Road

Dhruvdesh Motors

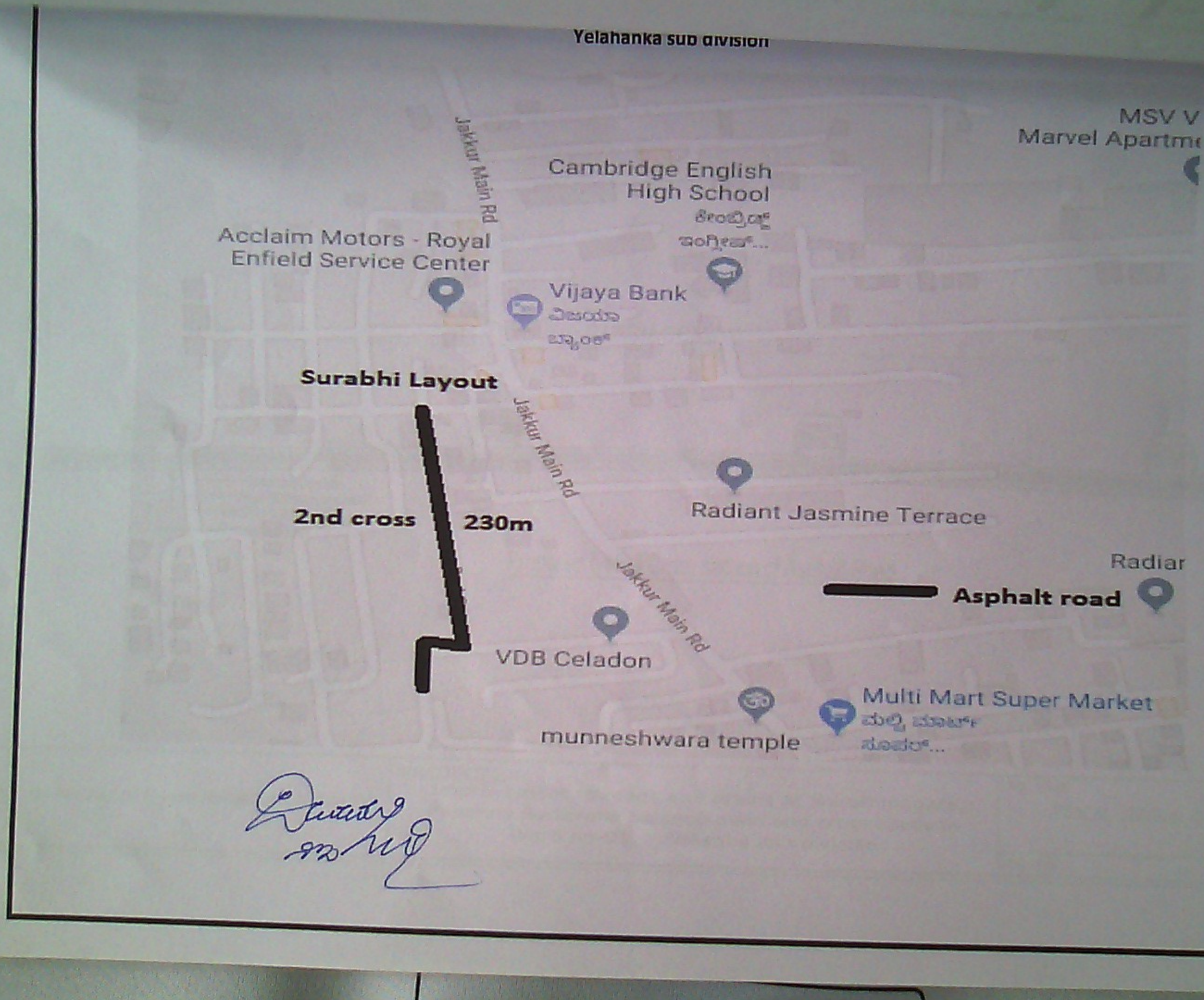
Maruthi Hospital
ಮಾರುತಿ
ಆಸ್ಪತ್ರೆ

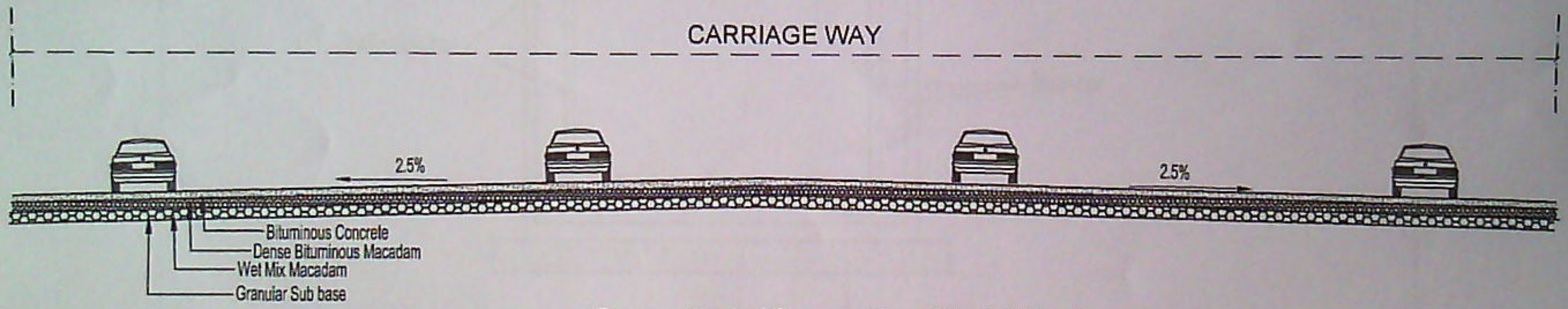
Kogilu Main Rd

Asphalt Road

INNOVATIVE AQUA
SYSTEMS PVT. LTD
ನವೀನ ಆಕ್ವಾ
ಸಿಸ್ಟಮ್ಸ್...

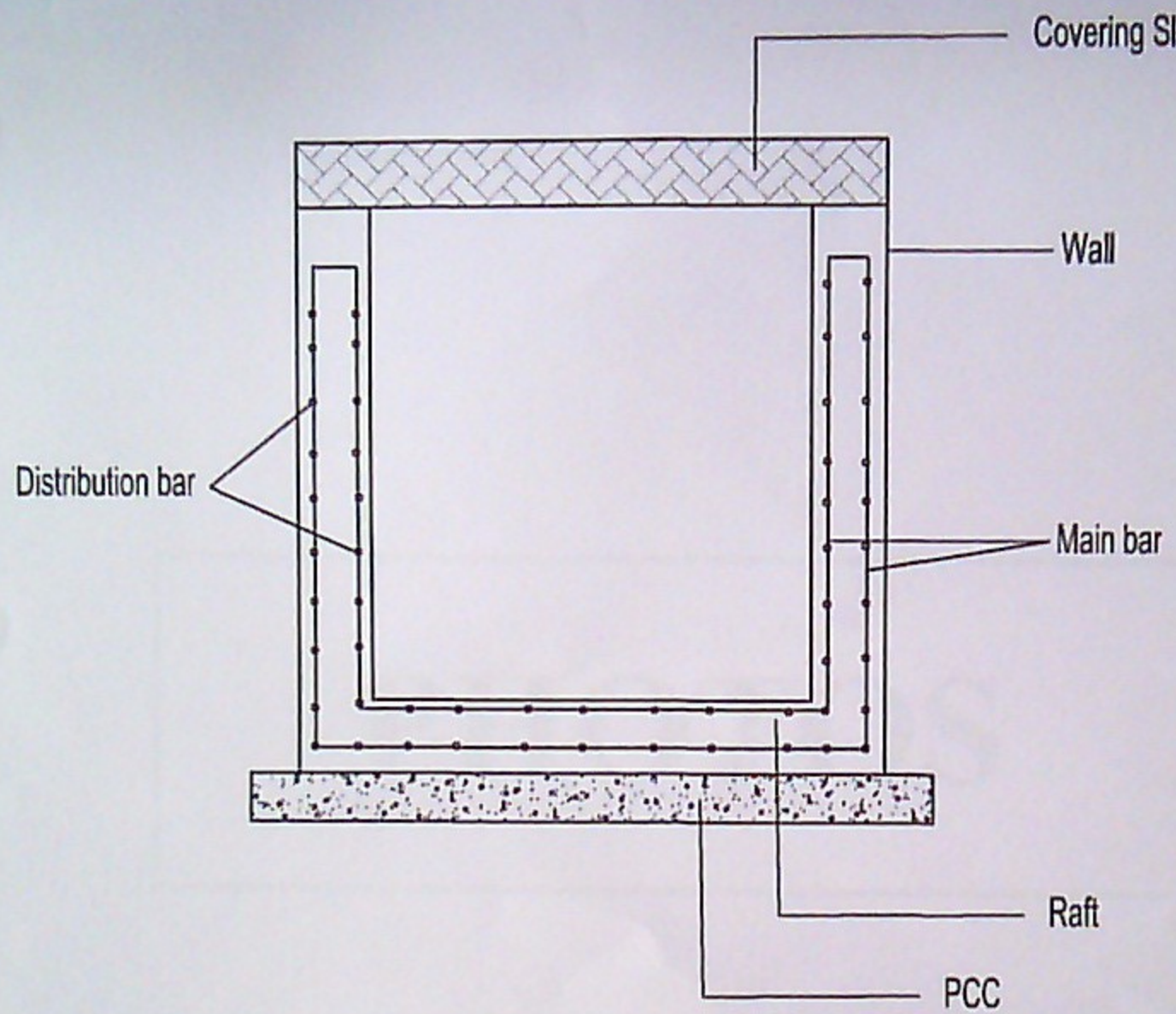
Yelahanka sub division





Proposed typical Cross section of Asphalt Road

CLIENT: BRUHAT BANGALORE MAHANAGARA PALIKE	PROJECT: Improvement to roads and drains at Maruthinagara, Papanna Badavane balance main and cross roads in Ward no-01, Yelahanka sub division	Dwg Title: TYPICAL SECTION OF ROAD	scale; N.T.S
			Date
		Dwg no:	Rev; RO



Proposed R.C.C. Drain